

Dear Bob, Harriet

March 3 1973

Did I ever thank you properly for your hospitality to me while I was in N.Y. last month? I have been so harassed, that I have the sense of having followed through on no more than a random fraction of my wishes and intentions; and that I might all too readily mistake the wish for the deed. Both of you were so weary when I saw you; I could not but feel a bit guilty for having kept you from your rest; but it was also plain that you were willing co-conspirators. If you know that our home is always open to you on precisely the same basis I will need no other reassurance. But again, it was a matter not to be overlooked that an effort that, in other circumstances, might well be labelled as generous hospitality, in the event was a considerable sacrifice to friendship.

I was reminded of that visit, and of the two of you, by a local departmental decision that stems from my preoccupation with "disciplines" and my inversional resolves about the uses of the sociology of science. Gilda Loew is a biophysicist here, a woman of age more or less, who left a secure position teaching physics at Pomona College to marry a professor here at Stanford (at the SLAC highenergy physics center). She came to see me then (about 4 years ago) looking for a position that might use her skills, in a medical context. She happens to be a pure theoretician, who computes the shapes and binding energies of molecules as an exercise in quantum physics. She evidently has quite a good reputation in that field; she is neither interested nor competent in any experimental work, whatsoever. I offered her the hospitality of a courtesy appointment to allow her to transfer her NIH grants, in the expectation that she would soon find a permanent position in a department like pharmacology or biochemistry, or perhaps at one of the other schools in the Bay area.

Needless to say that hasn't happened; and one view of subsequent events would be an analogy with the Old Man of the Sea, or the oriental myth(?) of the fate of the suicide-preventer. But I have had too much regard for her talents, and too much sympathy for her predicament, to accept this view. Were she free to seek out a position without geographic restriction, I have no doubt of her "marketability", and indeed that she might even be much sought-after here; without that market valuation, and in the position of a seeker, she is in special trouble. Her main problem is that of the interdisciplinary/innovator. No one quite knows where to place her work in theoretical molecular biophysics (a position akin to Crick's before 1953; but at least he was interpreting experimental data, albeit mostly others'). Coupled with the "immobile woman syndrome", we have a nearly fatal disease.

Some sense of this had motivated my original "hospitality" to her; but I was quite resistant to distorting the professions of my own department and discipline by trying to carve out a definite niche for her there. However, an administrative crises loomed during the last year, with the university's taking a quite justifiable position of the most critical scrutiny of the irregulars who sought to apply for grant funds under its aegis. Fortunately, I had just made a rough scan of potential interdisciplines -- in the program we discussed of trying to anticipate and accelerate some of the eventual postmature sciences; and I had independently and self-surprisingly concluded that molecular-shape-theory was one of the high priority candidates--even though one can hardly yet find an instance where empirical measurements do not outpace the theoretical predictions.

Even so, I might have effectively compartmentalized these lines of thought, if I had not self-consciously decided not to, along the lines I have discussed with you^{Bob} some times in the past. So... I did decide to grasp the nettle, and try to fight through an appointment for her at a faculty level.

I expect the main trouble to come from my own department. "Don't we have higher priorities for Genetics than that, etc." Alternatively, "well, if we are going to fill a slot in this new field, shouldn't we start a national search de novo and find the best possible person for it?" This is more difficult to answer; in fact, Gilda will be content to take a tentative and soft-money-funded kind of role (with the expectation of eventual solidification) that would probably deter most competitors. And I am also trying to help solve a problem for an immobile woman without (I am confident) doing any significant violence to the university's traditional standards.

It is on this latter point that I might ask you² for some substantial help, knowing that you must have thought a great deal about the problem of reconciling an array of values that, at first order, may be in some conflict. To restrict one's search geographically, in filling a given niche, inevitably suboptimizes the candidates with respect to any other parameter. One is reminded of the Adam-Smithian arguments against protectionist tariffs as impediments to the most economically efficacious allocation of resources. And yet there are, of course, domestic values of a high order that need to be protected! Were it not for the long range consequences of the tenure system (another manifest form of immobility), one could argue that the cultivation of a reputation for fair-dealing towards women will enhance its market-attractiveness to some (but perhaps not all!) men. If you can suggest the most persuasive and thoughtful articulations of this problem -- I do not of course have any need for reminders of shrill polemics -- it would be most helpful.

All the best,

Notes:

1. Fortunately, as a theoretician she needs a minimum of facilities and space-- a bare office and a computer terminal. Indeed, her sharing in the funding of the computer facility, by virtue of grant-paid fees, helps the community: we are always at the margin of a significant economy of scale in that arena.
 2. This work is perhaps the ultimate of reductionism; one of her projects concerns the shape-characterization of psychotropic molecules like opiates; one should be able to impute the shape of the mind therefrom... at least insofar as this can be reductively defined.
 3. Have you noticed how many of the very few women who have achieved a high reputation in mathematical areas have specialized in molecular shape? There is a whole tribe of female crystallographers, epitomized by Lonsdale. Field-study of primates (a la Goodall) is another idiosyncratic specialty; but Leakey (Sr.) may be personally responsible.
- P.S. The current controversy about evolution in Calif. textbooks looks like a promising arena for some contemporary sociology/philosophy of science. Have you already thought much about that?

Do you really believe this? I have sometimes thought so, but on more critical reflection now doubt it. The average quality of science may be dependent on other cultural factors far more than on its total volume (which I assume is proportional to level of financial support). Internationally, countries that did not support science (Italy, Japan before 1960, India) produced almost nothing worthwhile in the experimental sciences, i.e., even in proportion to the total level of activity. And I am inclined to think that the overall quality of science in the US has improved even through the funding spurt of the 60s. But these are subjective impressions.

How test a point (loose allegations about which can only deepen the political problems facing the sciences today?) I've asked Garfield to think about the "impact factors" of say chemistry, as published in US vs UK journals, and as expressed in the citational behavior of Germans and Japanese, who I would not to expect to have strong extrascientific biases on this point.

As far as I perceive it, and despite some personal chagrin about a few egregious exceptions that tend to prove the rule, the quality of scientific work in the fields I know is consistent with the peer-evaluations that are reflected in grant approval. The balance from discipline to discipline is perhaps another story: forgive me if I say that very little of the 'social science' funded by NIMH would meet either your standards or my own, and was often justified by an expressed need to help support the development of competence. I was not much heeded when I suggested that most of the funds go to the very few individuals doing really first class work, to encourage them to form "institutes" or centers of excellence.

The sources of quality in science constitute such an important problem that I hope you might ~~xxxx~~ get some of your students to try to develop methods to test these propositions. Hasn't every generation deplored the vulgarization of culture by the hoi polloi?

A handwritten signature, likely "John", written in dark ink.